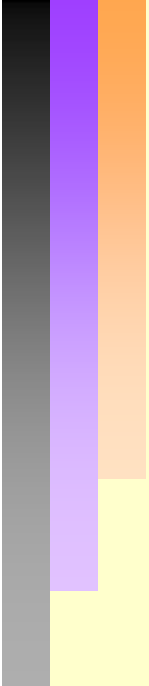




What Challenges Remain for Kentucky in its Quest for Educational Excellence?

**Jim Applegate, Vice President
for Academic Affairs
Council on Postsecondary
Education**

Measures and Milestones 2006
Lexington Convention Center
November 14, 2006

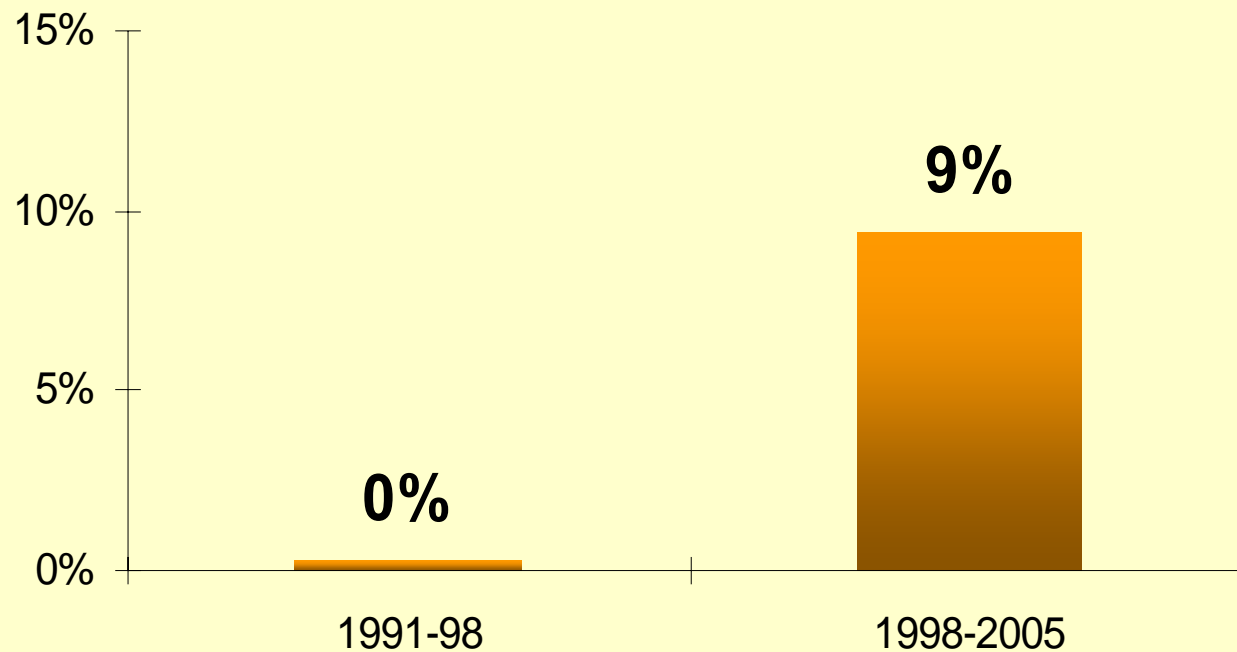


The Policy Framework: Postsecondary and Adult Education Reform

- ***Postsecondary Education Improvement Act of 1997 (HB 1)***
- ***Kentucky Adult Education Act of 2000 (SB 1)***
- **Kentucky Innovation Act of 2000**

Reform is Working. . .

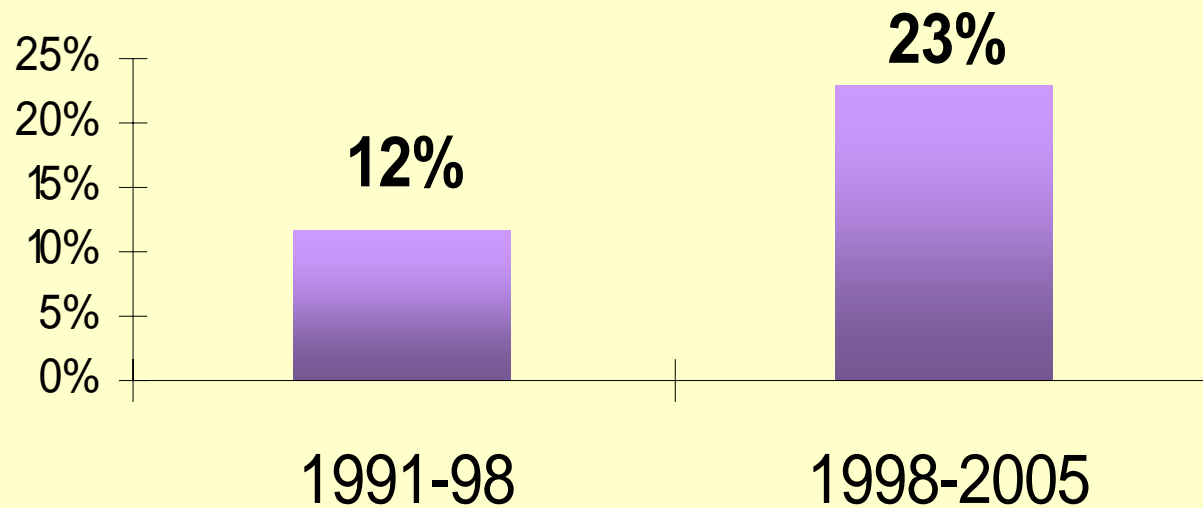
Four-Year Enrollment Growth: Before and After Reform



Public and Independent Four-Year Institutions
Undergraduate, Graduate and Professional

Reform is Working. . .

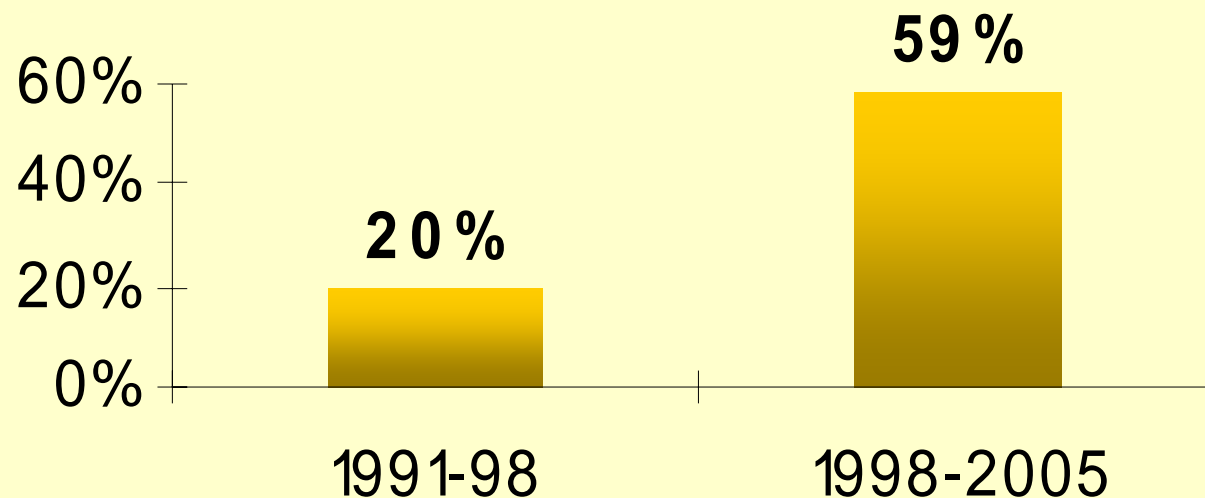
Growth in Degrees: Before and After Reform



Public and Independent Four-Year Institutions
Associates, Bachelor's, Graduate and Professional Degrees

Reform is Working. . .

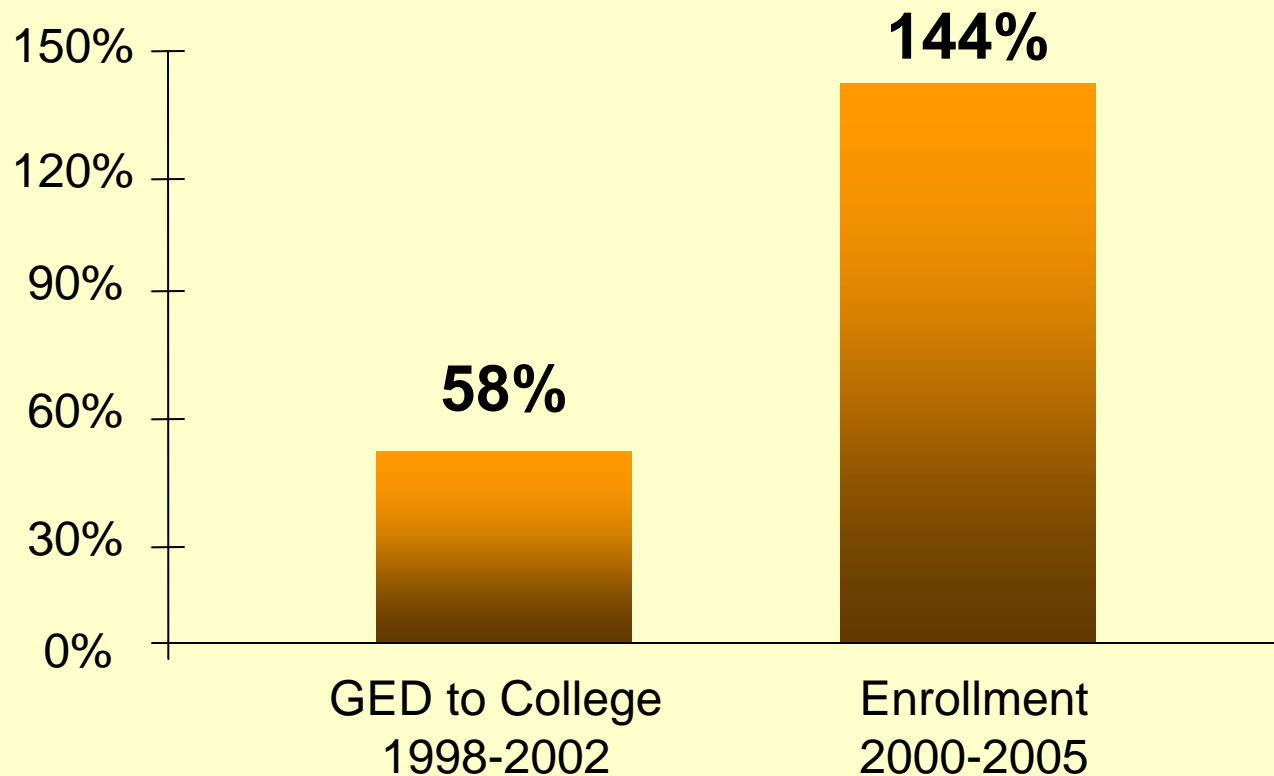
Growth in Associate Degrees: Before and After Reform



Includes all public, two-year institutions in 1991 and 1998

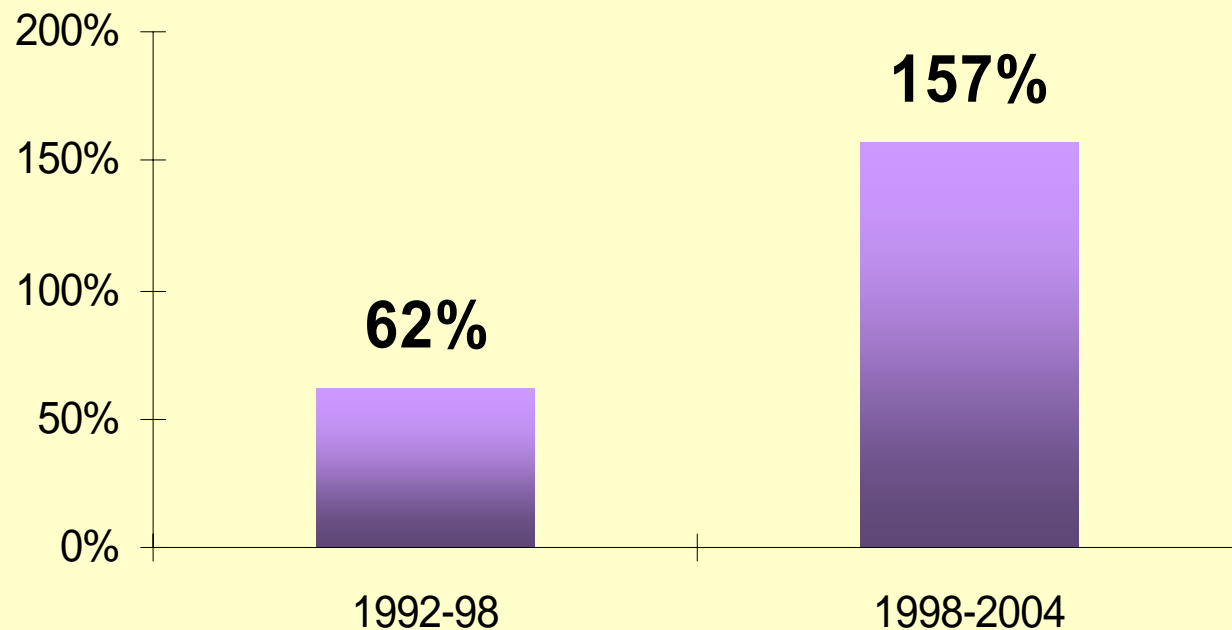
Reform is Working. . .

Growth in Adult Education College Going and Enrollment



Reform is Working. . .

Growth in Federal R&D Investment: Before and After Reform



Annual Federal R&D Expenditures at all Kentucky Institutions

...Still a Long Way to Go



Despite fifth largest percentage increase in educational attainment in the nation (1990-2000), Kentucky remains:

47th in adults with at least a bachelor's degree

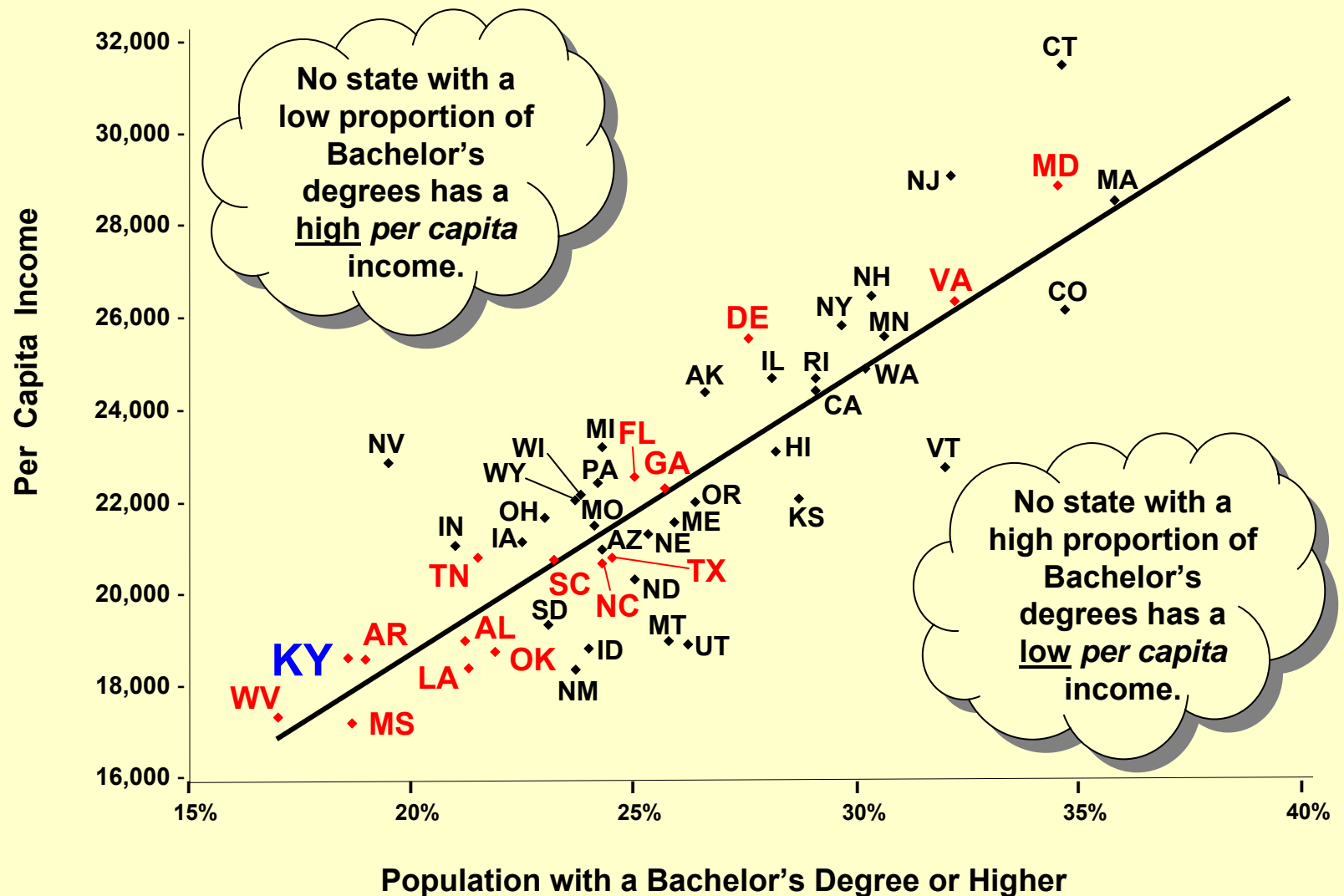
Despite 29% increase since 1998, Kentucky remains:

43rd in per capita income

States that Experienced the Greatest Increases in Educational Attainment Also Experienced the Greatest Increases in Personal Income! (from 1980 to 2000)



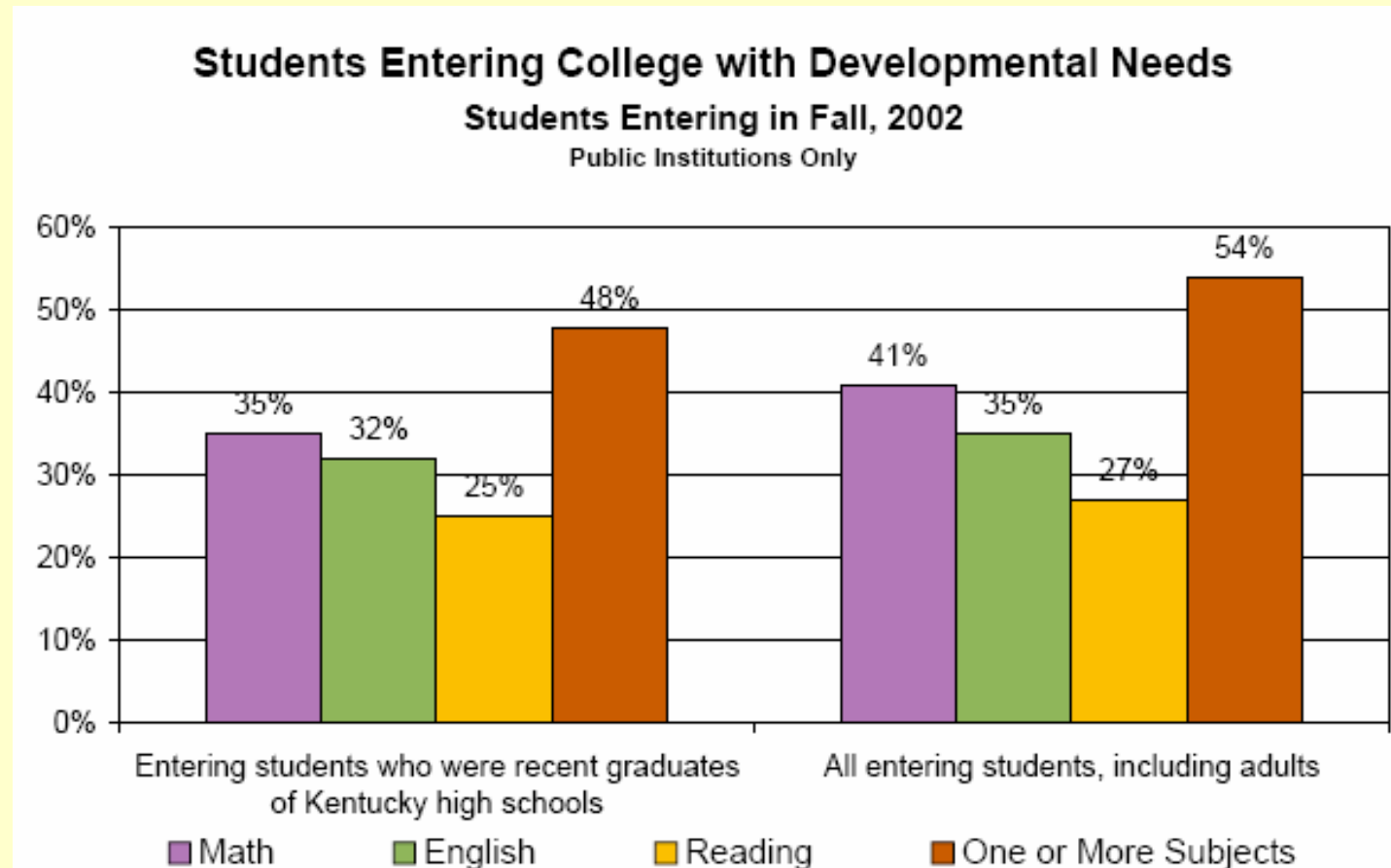
Per Capita Income vs. Share of Adult Population with a Bachelor's Degree or Higher (2003)



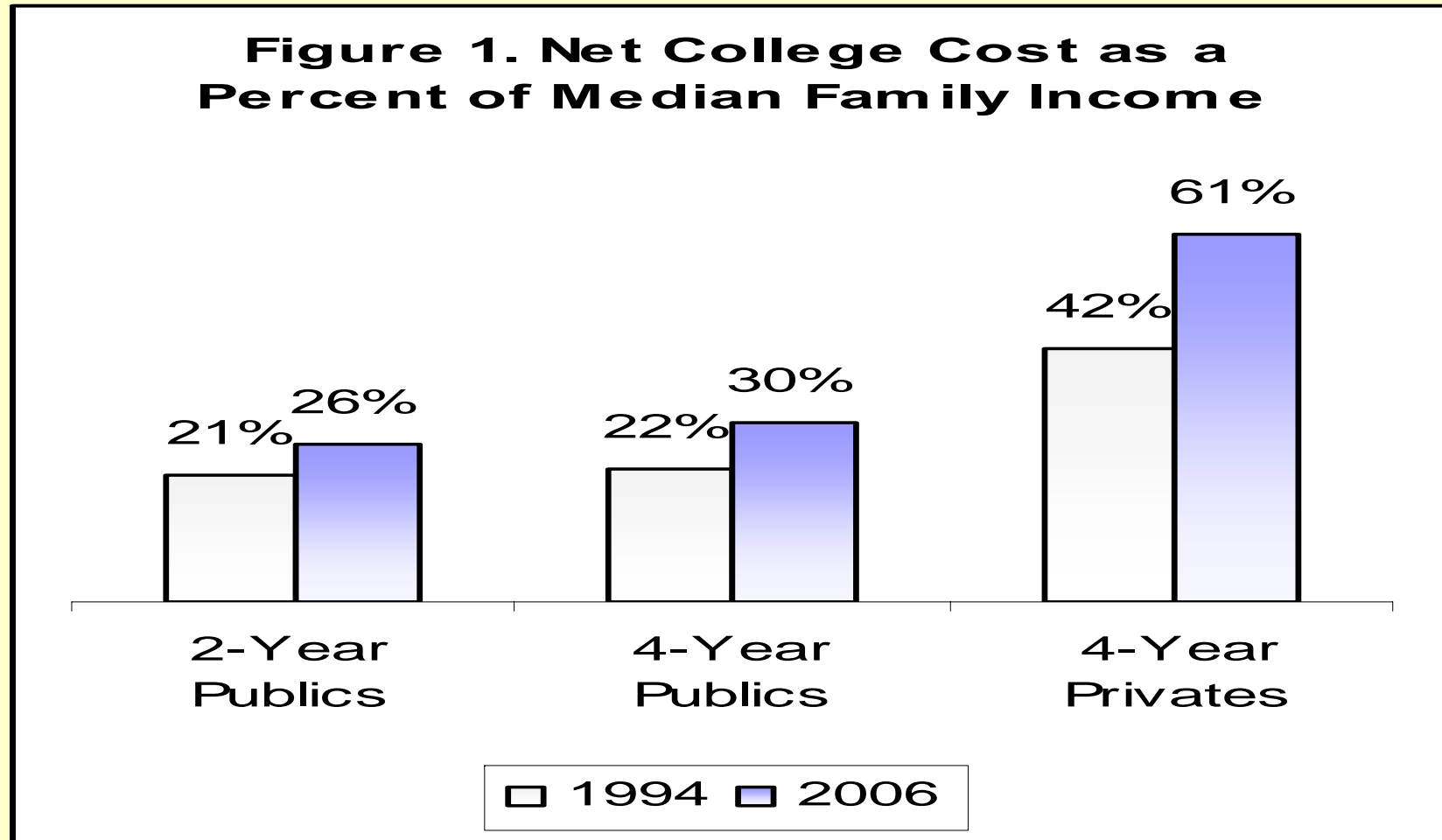
US College Graduation Rate Is Below Average In Developed Countries, 2004

<u>Rank</u>	<u>OECD Member Country</u>	<u>Graduation Rate</u>
1	Japan	94
2	Turkey	88
3	Ireland	85
4	United Kingdom	83
5	Korea	79
6	Spain	77
7	Finland	75
8	Iceland	73
9	Germany	70
10	Mexico	69
10	Australia	69
10	Denmark	69
10	Netherlands	69
14	United States	66
15	Czech Republic	61
16	Belgium	60
17	Austria	59
17	France	59
Source: Organization for Economic Co-operation and Development, Education at a Glance 2004.		48
		42

Challenge 1: Creating a Seamless P-16 System



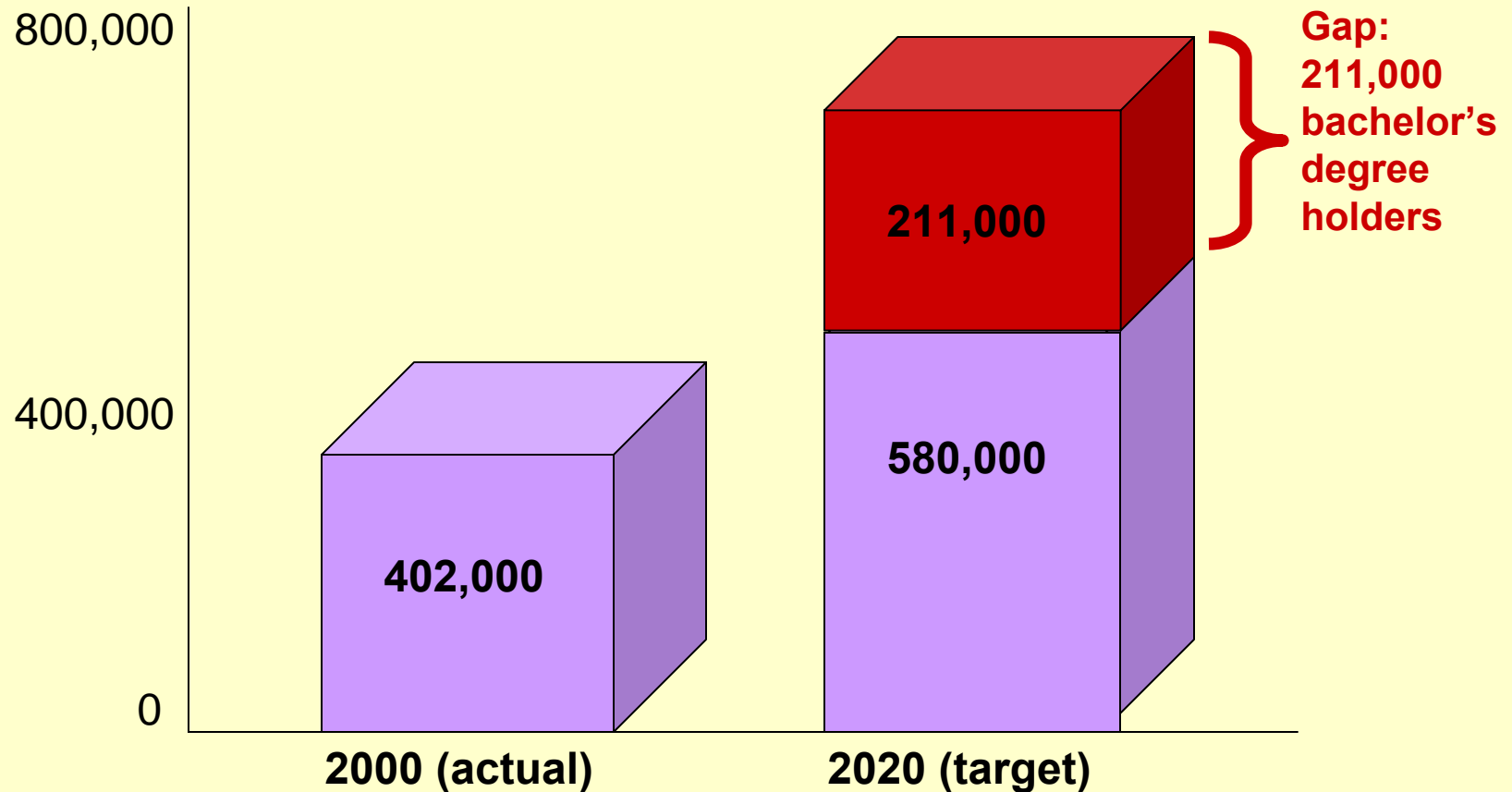
Challenge 2: Maintain Affordability



Challenge 2: Maintaining Affordability

- **Increases in college costs nationally have outpaced inflation for 20 years**
- **Kentucky colleges are reasonably affordable for most full-time students, and students don't appear to have an unreasonable debt load, BUT**
- **Kentucky colleges are not affordable for adult, part time students and students in the lowest income levels: the very groups we must reach to achieve our goals**
- **Most states, including Kentucky, received a failing grade in affordability compared to 1992 on Measuring Up report card**

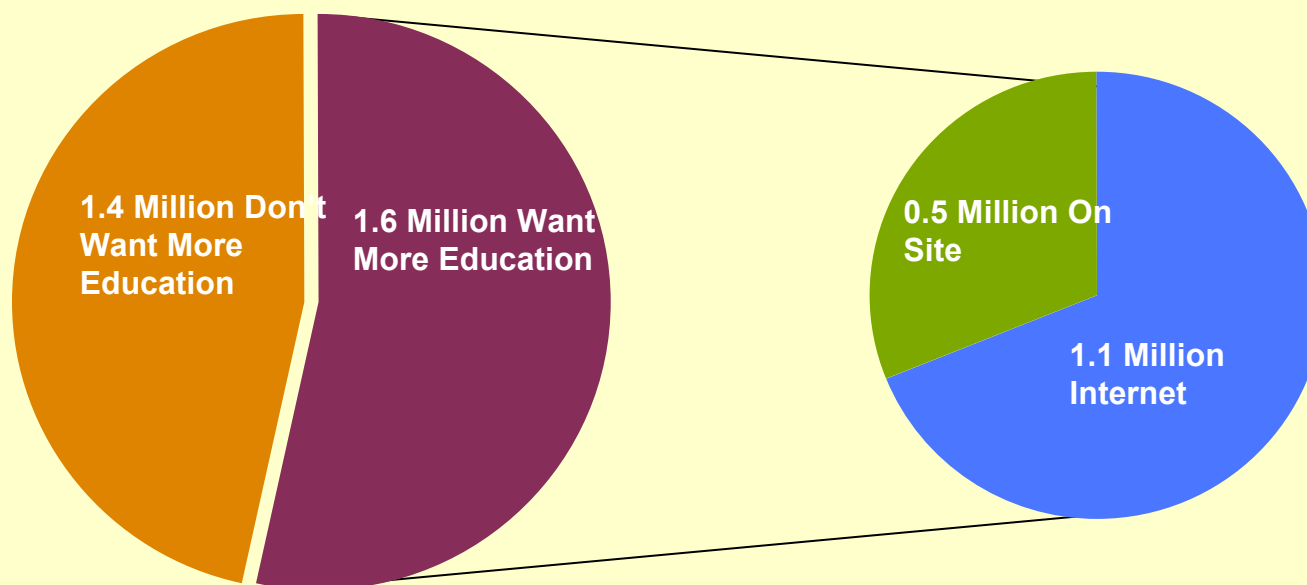
Challenge 3: Doubling the Numbers



GOAL: Double the number of Kentuckians with at least a bachelor's degree by 2020.

Doubling the Numbers: Innovative Use of Technology

3 Million Adults in KY



Two-thirds of people seeking postsecondary education want online programs.

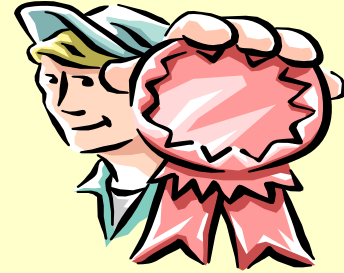
KYVU Public Opinion Poll, Feb-March 2000

Doubling the Numbers: Redefining the “Traditional” Student

- **Of America’s 14 million undergraduates**
 - Nearly 1/3 are over 24 years old
 - More than 40% attend 2 year colleges
 - 40% are enrolled part time
 - Nearly 1/3 work FULL time
 - Almost 40% are self-supporting
 - 27% have children



Challenge 4: Raising the Bar on Quality

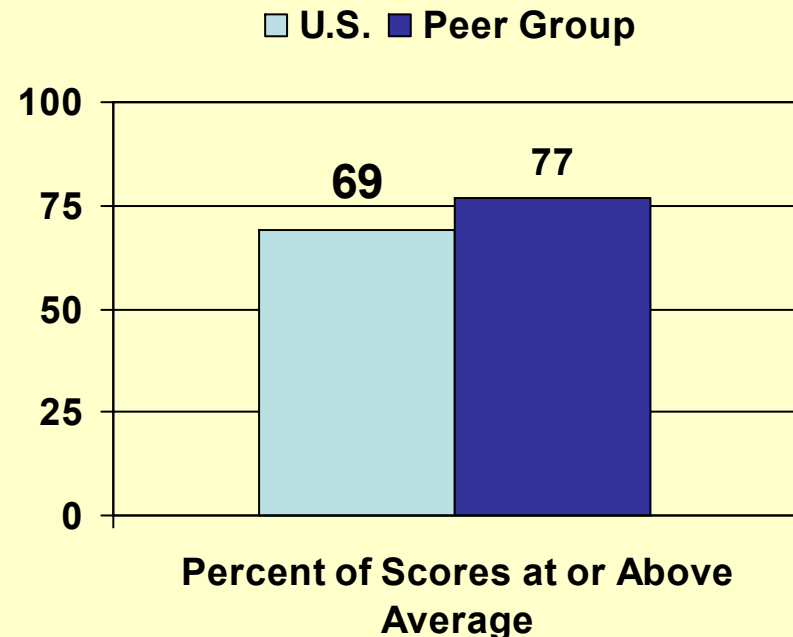


- Only 31% of college graduates assessed in the 2005 National Assessment of Adult Literacy can read complex texts and draw complicated inferences (40% in 1992)
- Fewer than half of college graduates demonstrate broad proficiency in math and reading (American Institutes for Research, 2006)
- National Commission on the Future of Higher Education (“Spellings Report”) highlights lack of transparency and direct assessment of college level learning
- Measuring Up continues to give all states an “incomplete” in assessing college learning but Kentucky receives a “+” as a pilot state solving the problem

Challenge 4: Raising the Bar on Quality in Kentucky

- National Survey of Student Engagement 2005 measures of effective educational practices are similar to counterparts across the nation
- Measuring Up Learning Grade student assessments indicate below-average 4-year college graduate performance and above average 2-year graduate performance
- Kentucky prepares students well for state teacher examinations and licensures but is below average in preparing students for graduate study

**Kentucky's Benchmark
Scores of Effective
Educational Practice**



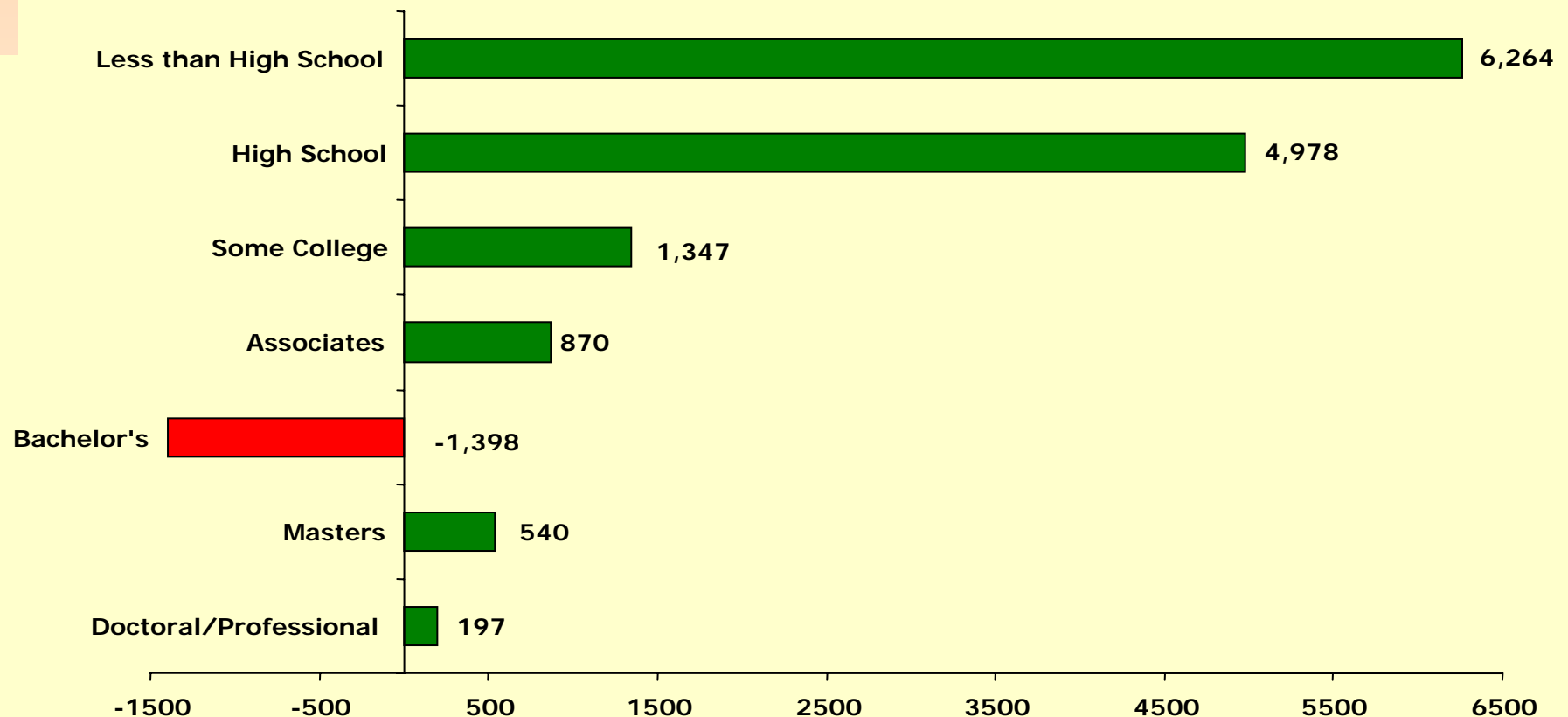
Challenge 5: Effective Partnerships



- **P-12 education**
- **Adult education**
- **Public and private postsecondary education**
- **Employers/private sector**
- **Communities/regions**
- **Government (e.g., economic development and workforce agencies)**

Challenge 5: Effective Partnerships

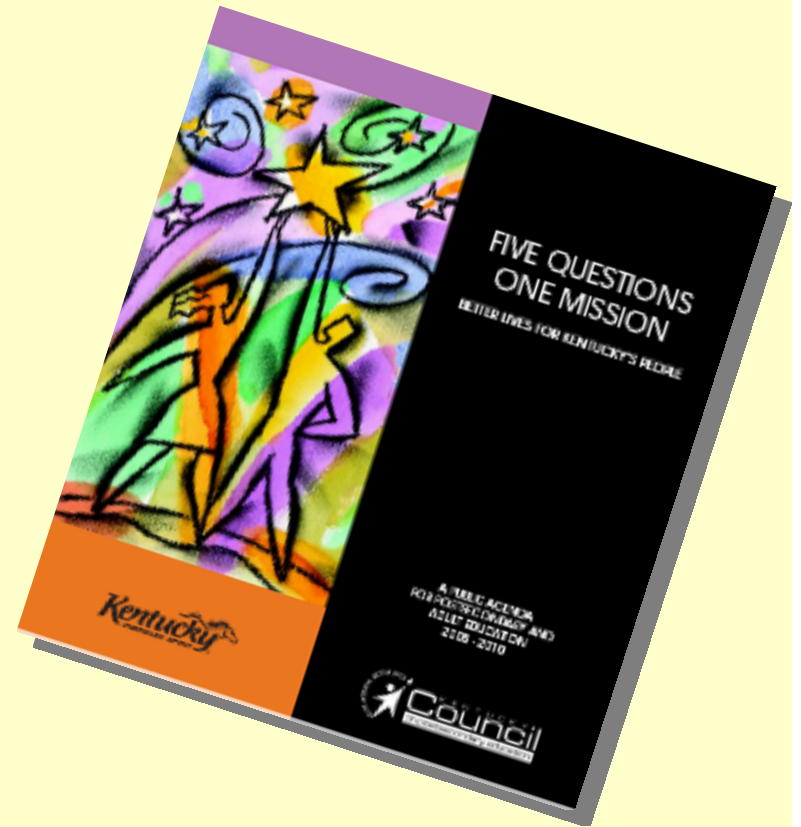
Kentucky Net Migration by Degree Level, Ages 22-29, 1995-2000



Source: U.S. Census, Public Use Microdata Samples, 2000

Challenge 6: Sustaining the Public Agenda

- Are more Kentuckians ready for postsecondary education?
- Is Kentucky postsecondary education affordable to its citizens?
- Do more Kentuckians have certificates and degrees?
- Are college graduates prepared for life and work in Kentucky?
- Are Kentucky's people, communities, and economy benefiting?



To Create 21st Century Colleges

FROM

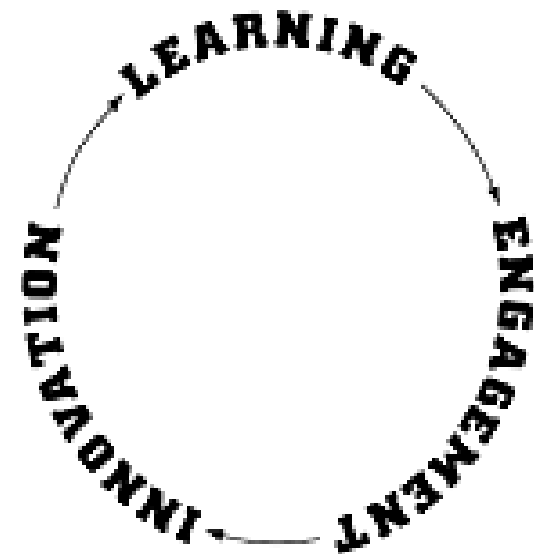


TO

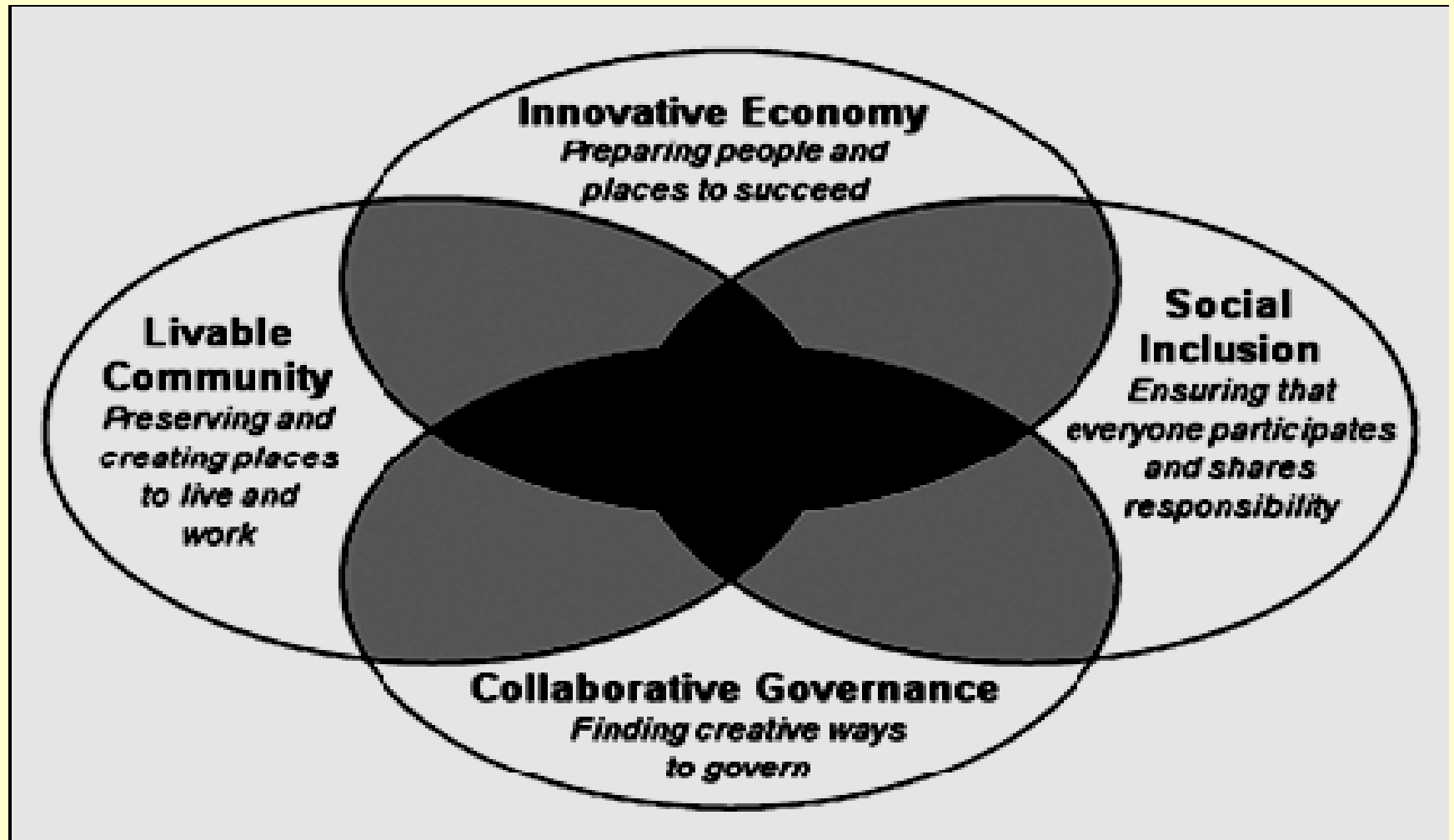
Ivory Tower
3 pillars



Stewards of Place
3 pillars



So Our Colleges and Graduates Are Prepared To Contribute To..



And Succeed in a Spiky World

Population

Light Emissions

THE WORLD IN NUMBERS

The World Is Spiky

Globalization has changed the economic playing field, but hasn't leveled it

POPULATION
Urban areas house half of all the world's people, and continue to grow in both rich and poor countries.

The world, according to the title of the New York Times column, Thomas Friedman's book, is flat. Thanks to advances in technology, the global playing field has been leveled, the prize is there for the taking, and everyone's a player—no matter where on the surface of the earth or on the cyberside. "In a flat world," Friedman writes, "you can move a vehicle faster or smarter."

Franklin is not alone in this belief. For the better part of the past century, economists have been writing about the leveling effect of technology. From the invention of the telephone, the automobile, and the airplane to the rise of the personal computer and the Internet, technological progress has steadily eroded the economic importance of geographic place—or so the argument goes.

This is partnership with colleagues at George Mason University and the geographer Tim Collier, of the Center for International and Security Studies, at the University of Maryland. I've begun to share a very different economic geography. By sharing, my research the international economic landscape it was a relief. On the contrary, our world is increasingly "global." In terms of both slower economic home power and causing wider international

surprisingly few regions truly matter in today's global economy. What's more, the winners peak—the three regions that drive the world economy—are growing ever higher, while the losers slowly languish.

The most obvious challenge is the explosive growth of the world's cities. More and more people are clustering in urban areas—the world's demographic momentum remains so steep. The share of the world's population living in urban areas, just three percent in 1850, was nearly 20 percent by 1950. Today it stands at about 50 percent. In advanced countries three out of four people live in urban areas. Map A shows the uneven distribution

PEACE, HILLS, AND VALLEYS

[illegible]

of the world's population. Five megacities currently have more than 10 million inhabitants each. Twenty-eight cities have more than 10 million inhabitants, one more than 5 million, and 140 more than 2.5 million. Population density is of course a crude indicator of human and economic activity. But it does suggest that in most cases of the second forces of economic growth—rising people and resources, and pushing on some places more than others

Still, differences in population density may undermine the optimism of the global economy, the constraining dominance of the world's most productive urban areas is astounding. When it comes to total economic output, the six largest U.S. metropolitan areas combined are behind only the United

house in a village in Japan. New York's economy alone is about the size of Russia or Brazil, and Chicago is on a par with Sweden. Together New York, Los Angeles, Chicago, and Boston have a bigger economy than all of China. If U.S. unemployed men were countries, they'd make up half-area of the biggest 100 economies in the world.

Unfortunately, no single comprehensive information source exists for the economic production of all the world's class. A rough proxy is available through Map 1, which shows a variation on the widely produced trend of the world's growth, with higher concentrations of light-industrial higher output and, presumably, stronger economic production, appearing in greater relief of U.S. regions appear at most. Handed on to this map, from their remote one might look across a smaller economic range, reaching across Europe, some industrial peaks in Asia, and a few scattered hills throughout the rest of the world.

Population and economic growth are both spiky, but it is known – the engine of economic growth – that it is most concentrated. The World Intellectual Property Organization recorded those 200,000 patents from residents in more than a hundred countries in 2012 (the most recent year for which reliable statistics) from two thirds of less than 20 countries and Japan was in second. Eighty-five per cent were by the residents of just five countries (Japan, the United States, South Korea, Germany, and Russia).

researchers concluding, in one follow-on study, that the effects of the 2002-2003 growing season follow different weather patterns in the United States—which means growers' applications for nearly all major insecticides worldwide, and holds also for the same insecticides—will be similar for many. Nearly 80,000 acres of the 200,000 pasture grown in the United States in 2002 were in America's "Sweet 16" zone, which is Japan's sweetest, and 11,000 in Germany. The next two most insecticide-intensive countries—including the United Kingdom in Europe plus Taiwan, South Korea, Israel, and Canada—produced roughly 25,000 acres. The rest of the

LIGHT ENHANCER

Animals: acutely—highly attracted to many agro-ecosystems. 2 remarkably common. Many rapt, despite their large populations; rarely regale.

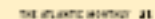
board, the world accounted for just one percent of all kidnappings posed in the United States. In 2007 India generated 341 U.S. poses and China 237. The University of California alone generated more than either country. IBM accounted for one-third as many as the two combined.

This is not to say that Indians and Chinese are non-innovative. On the contrary. According to a study of the University of California at Berkeley, has shown that Indians and Chinese were more likely to be co-invented roughly 50 percent of all Silicon Valley startups in the late 1980's. These entrepreneurs are creative people but are not at all in Silicon Valley and be described as low innovative entrepreneurs before their arrival because economically viable. Such entrepreneurs move, and then a large number of them.

Map G-vehicle number one of the team from both the World Intellectual Property Organization and the U.S. Patent and Trademark Office, shows a world composed of innovation peaks and valleys. Tokyo, Seoul, New York, and San Francisco remain the iron-runners in the ongoing competition. Boston, Seoul, Austin, Toronto, Vancouver, Berlin, Stockholm, Helsinki, London, Osaka, Taipei, and Sydney also stand out.

Map D shows the residence of the 1,200 men brutally died soldiers in leading fields. Scientific advance is even more concentrated than power.

Scientific Citations



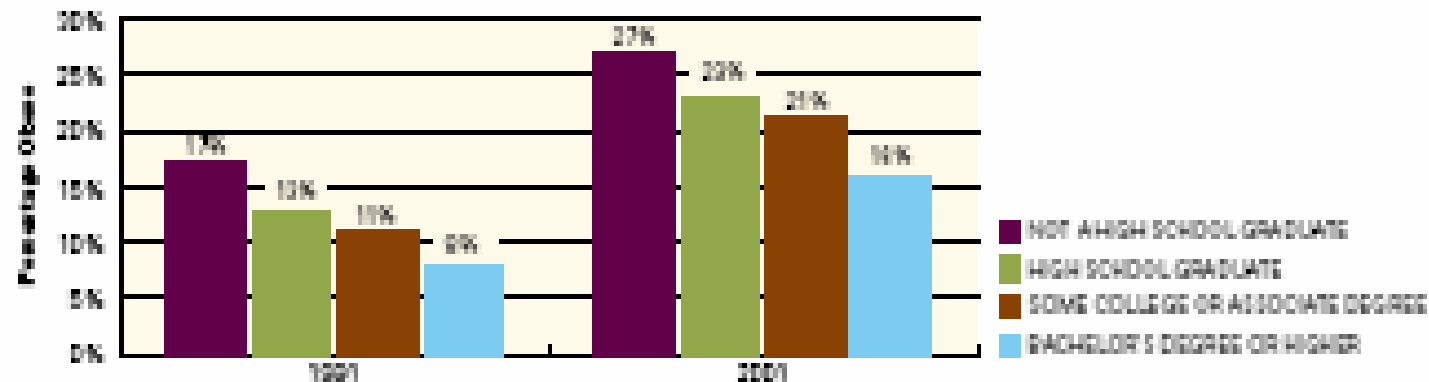
What's the Return?

- Increase of \$5.3 billion in state revenue
- Increase of \$71 billion in personal income
- Bachelor's degree holder earns \$1 million more over a lifetime than a high school graduate
- Lower crime rates
- **AND ...**



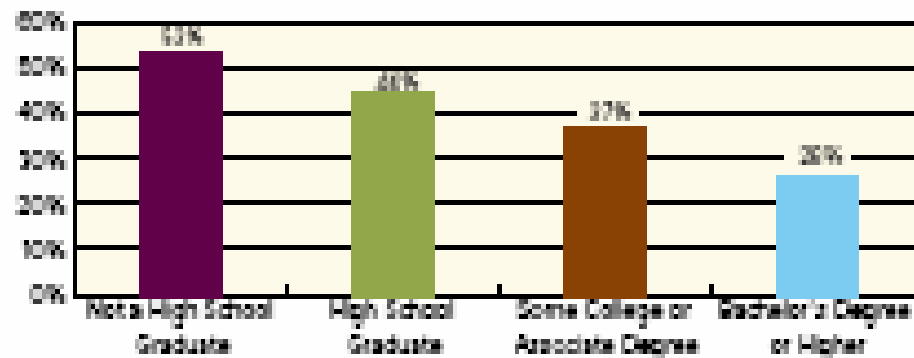
Lower Health Care Costs

Figure 5d: Obesity in Adults Age 20 and Older in the United States by Education Level, 1991 and 2001



Source: CDC, 1991, Table 5.

Figure 5e: Multiple Risk Factors for Heart Disease: Percentage with Two or More High-Risk Factors by Education Level, 2003

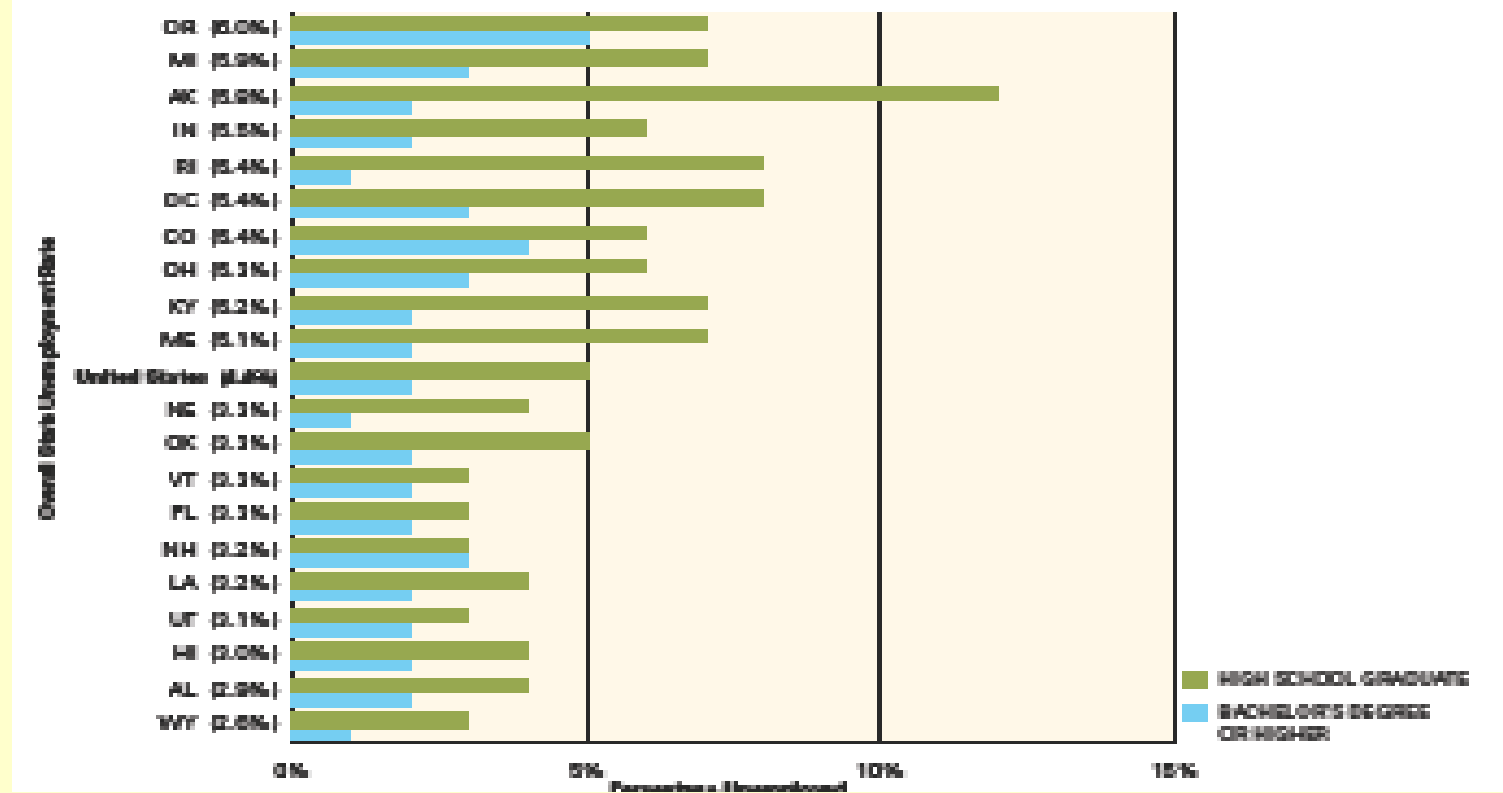


Note: Adults with two or more of the following: high blood pressure, high cholesterol, diabetes, obesity, current smoking, or physical inactivity.

Source: CDC, 1994b.

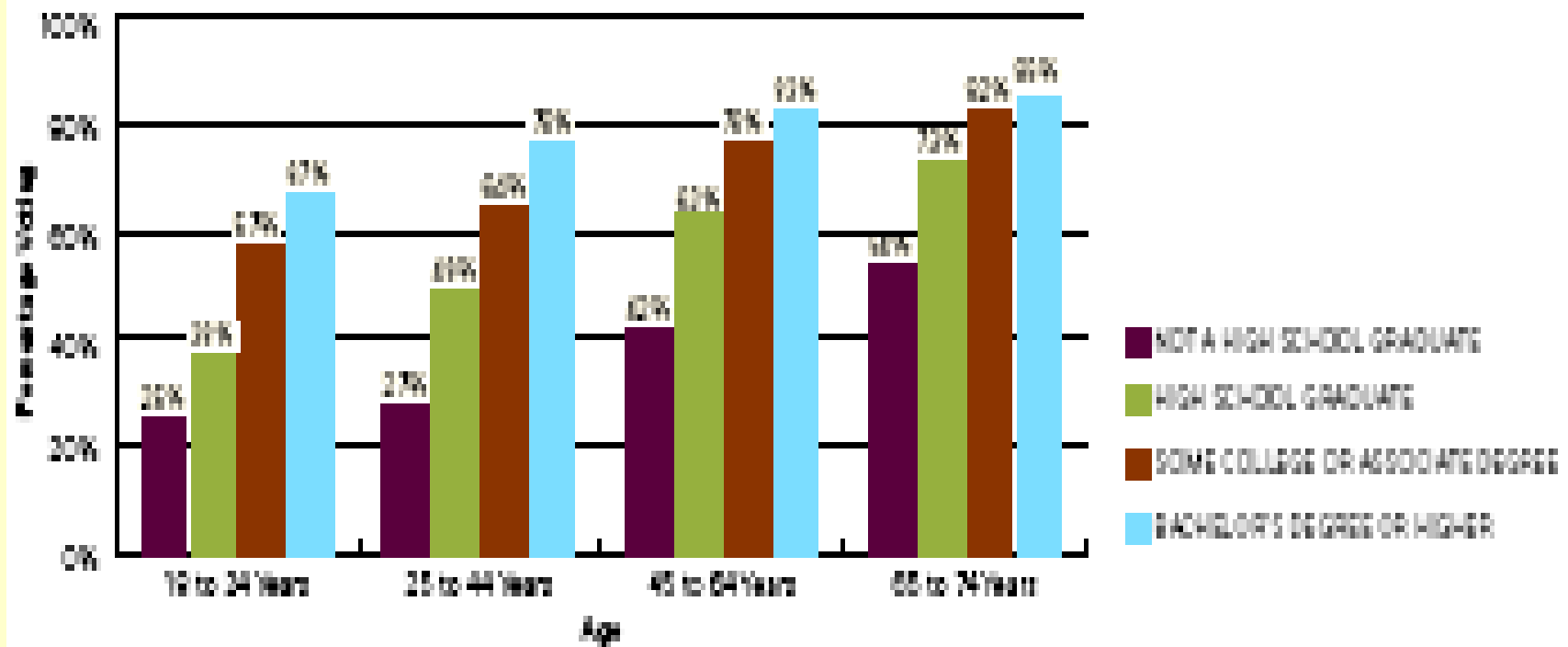
Lower Unemployment

Figure 4: Unemployment Rates by Education Level for States with the Highest and Lowest Unemployment, 2005



Better Citizens

Voting Pattern by Age/Education, 2004



Source: U.S. Census Bureau, 2004b, Table E.



<http://cpe.ky.gov>